Datasheet for ABIN987821

EGF Protein

3 Images | 1 Publication

Go to Product page

Overview

Quantity:	50 µg
Target:	EGF
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active

Product Details

Sequence:	NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYRDLKWW EL
Characteristics:	The ED50, calculated by the dose-dependant proliferation of murine BALB/c 3T3 cells is less then 2 ng/ml, corresponding to a specific activity of 5.0×105 IU/ mg.
Purity:	> 95 % as determined by (a) Analysis by SEC-HPLC (b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel
Endotoxin Level:	Level Less than 0.1ng/myg (1 IEU/myg) determined by LAL test

Target Details

Target:	EGF
Abstract:	EGF Products
Background:	Human Epidermal Growth Factor (EGF) is a polypeptide growth factor which stimulates the proliferation of a wide range of epidermal and epithelial cells. Human Epidermal Growth Factor (EGF) is a 6,200 Da protein containing 53 amino acid residues. Synonym: rHuEGF, Epidermal Growth Facto. Formulation: The protein was lyophilized after extensive dialysis against 10mM

Target Details

	Phosphate buffer, pH7.0, 200mM NaCl buffer.
Molecular Weight:	6.0 kDa+/-10% determined by reduced SDS-PAGE Isoelectric Point The main zone between 4.0-5.0 analysis by IEF UV Scan The maximal absorption wave is 275+/-3 nm.
Pathways:	NF-kappaB Signaling, RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Protein targeting to Nucleus, Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling, EGFR Downregulation

Application Details

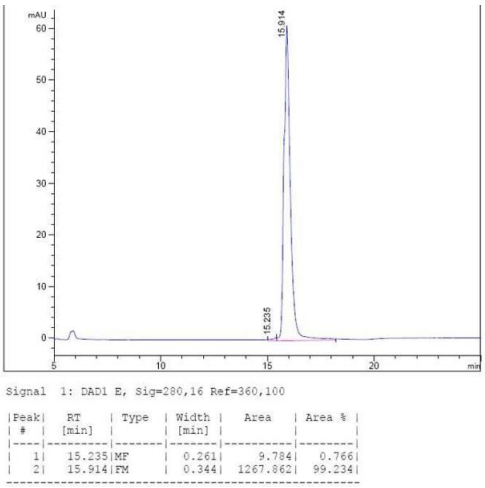
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	It is recommended to reconstitute the lyophilized Recombinant Human Epidermal Growth Factor (EGF) in sterile 18 Mohm-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Quantitation Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 2.858 as the extinction coefficient for a 0.1% (1 mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).2. RP-HPLC analysis, using a calibrated solution of EGF as a reference standard.
Storage:	-20 °C

Publications

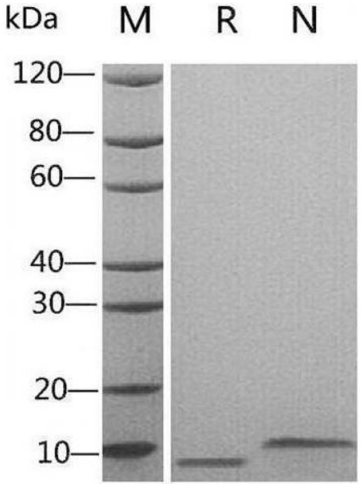
Product cited in:	Hedl, Abraham: "Distinct roles for Nod2 protein and autocrine interleukin-1beta in muramyl dipeptide-induced mitogen-activated protein kinase activation and cytokine secretion in human macrophages." in: **The Journal of biological chemistry**, Vol. 286, Issue 30, pp. 26440-9, (2011) (PubMed).



Signal 1: DAD1 E, Sig=280,16 Ref=360,100

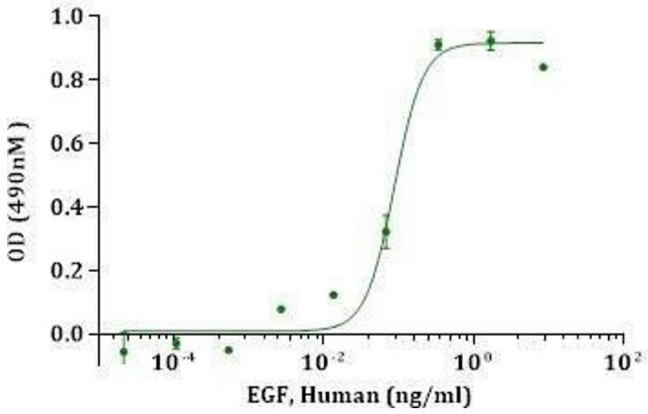
Peak #	RT [min]	Type	Width [min]	Area	Area %
1	15.235	MF	0.261	9.784	0.766
2	15.914	FM	0.344	1267.862	99.234

Image 1.



SDS-PAGE

Image 2. 2 µg of EGF, Human was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



Activity Assay

Image 3. EGF, Human stimulates cell proliferation of the Balb/3T3 Cells. The ED50 for this effect is less than 0.2ng/mL(0.10 ng/mL).